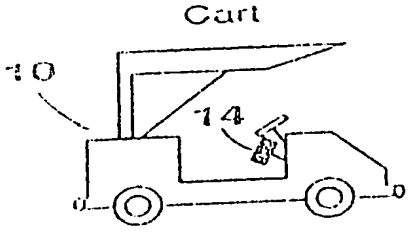


Fig. 1

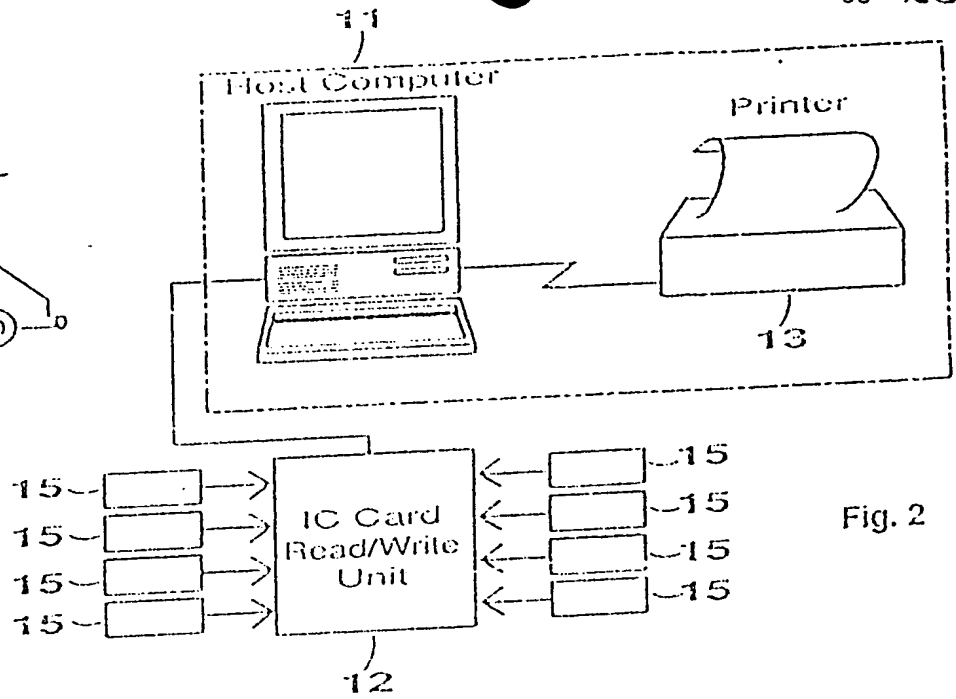


Fig. 2

Course visualization
Monochrome-four-gradation

Whole of the hole

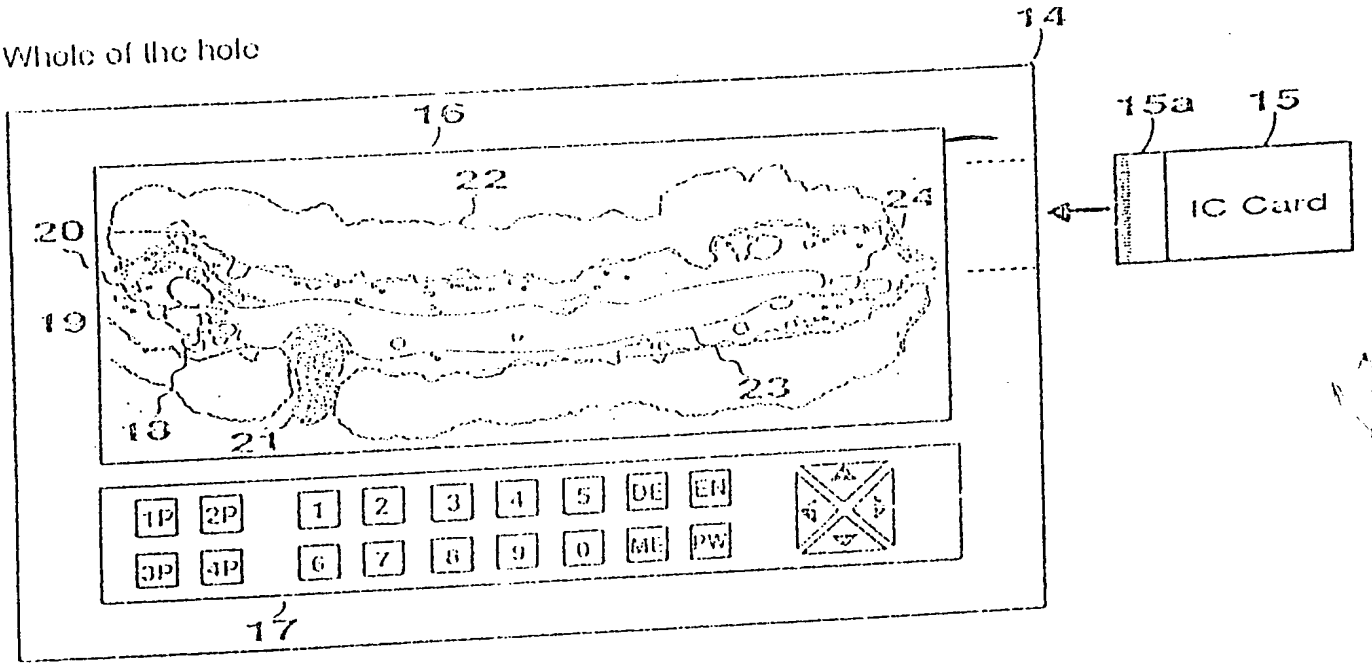


Fig. 3

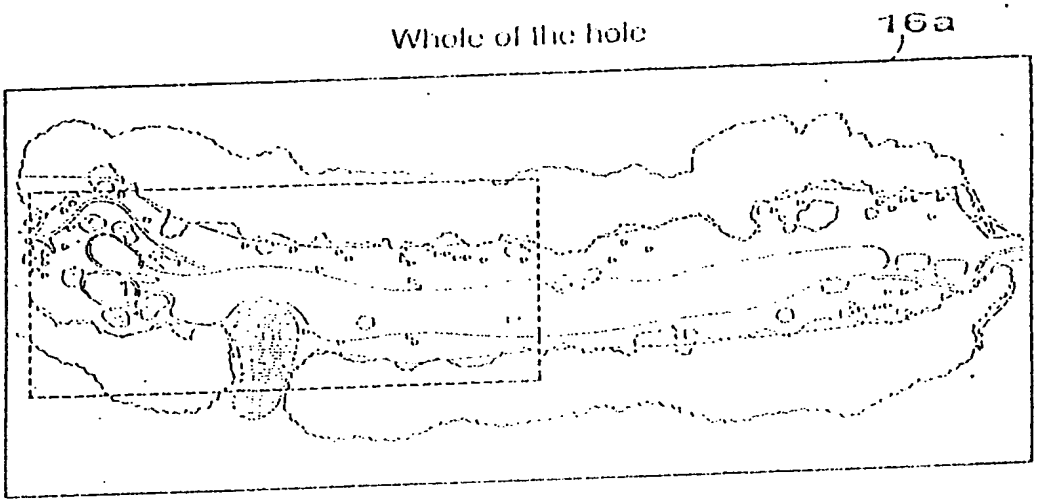


Fig. 4a

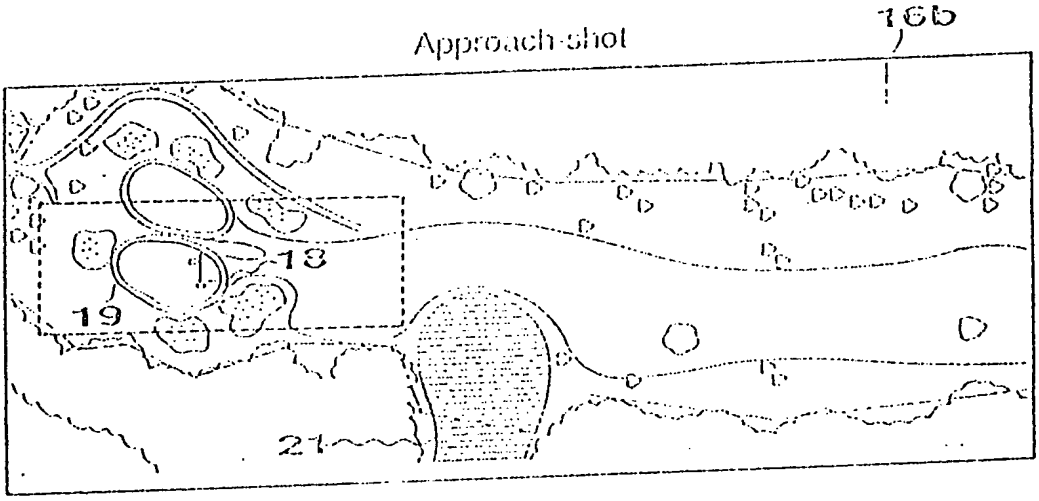


Fig. 4b

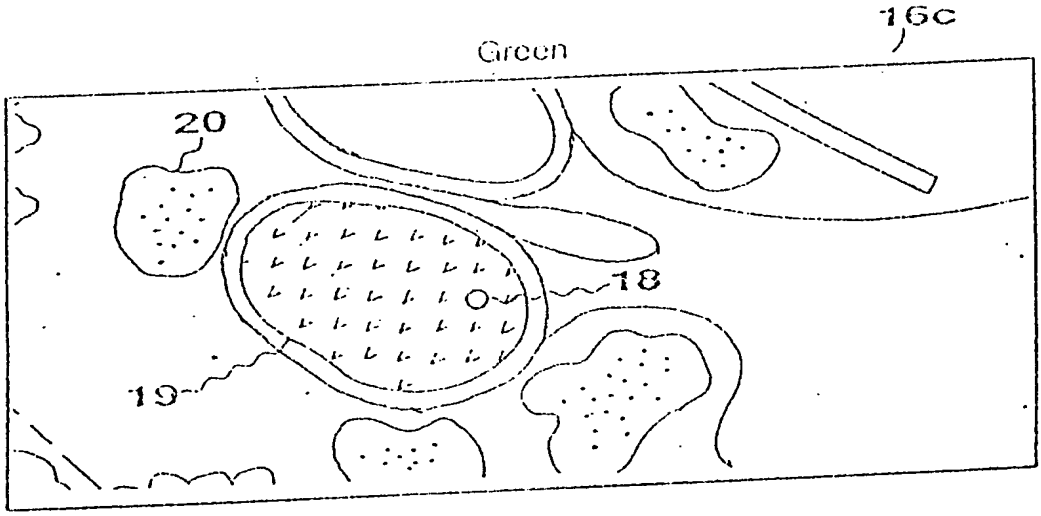


Fig. 4c

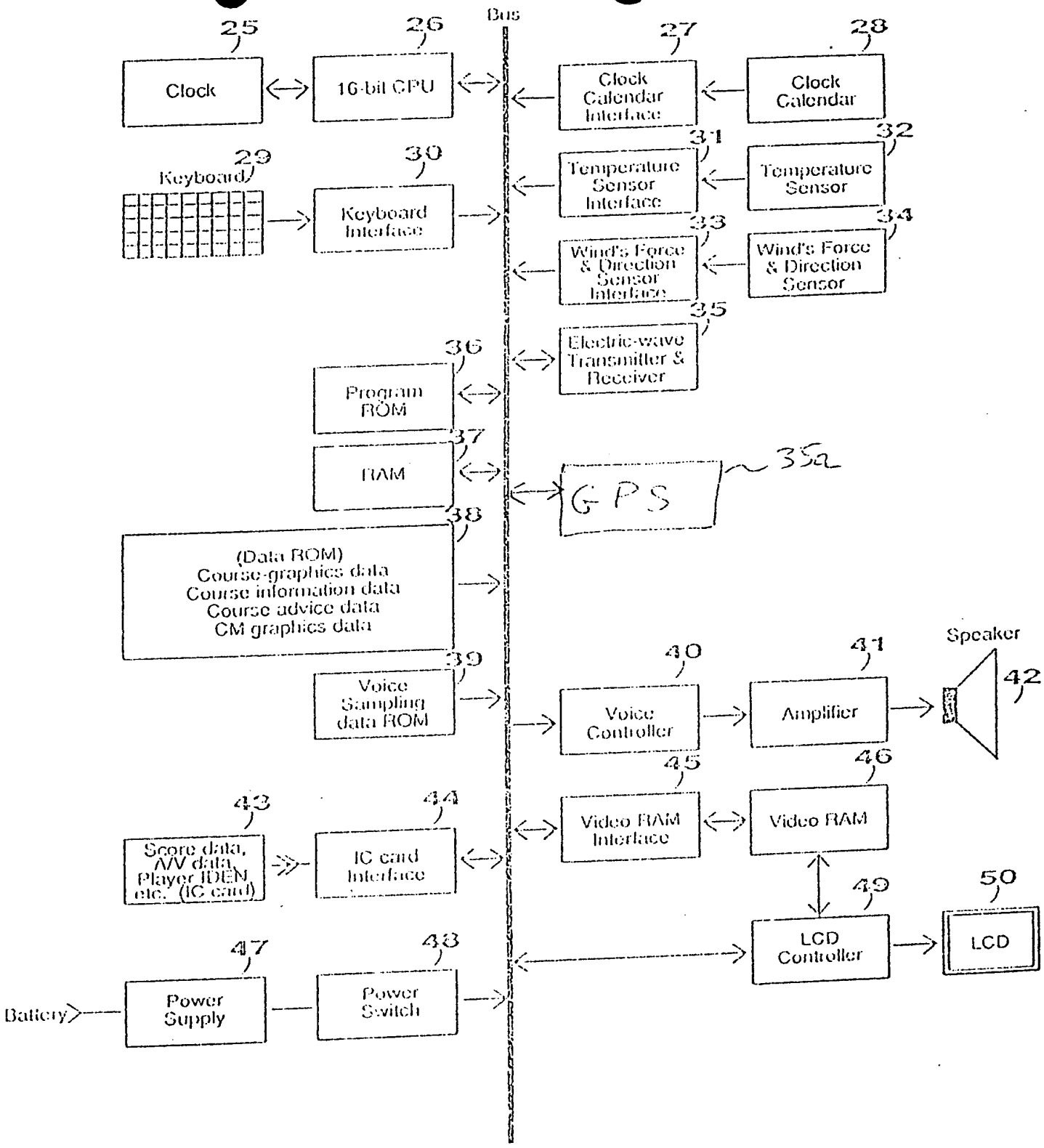


Fig. 5

System Block Diagram of "Smart Caddy" Mobile Computer

SMART CADDY PROGRAM FLOW CHART

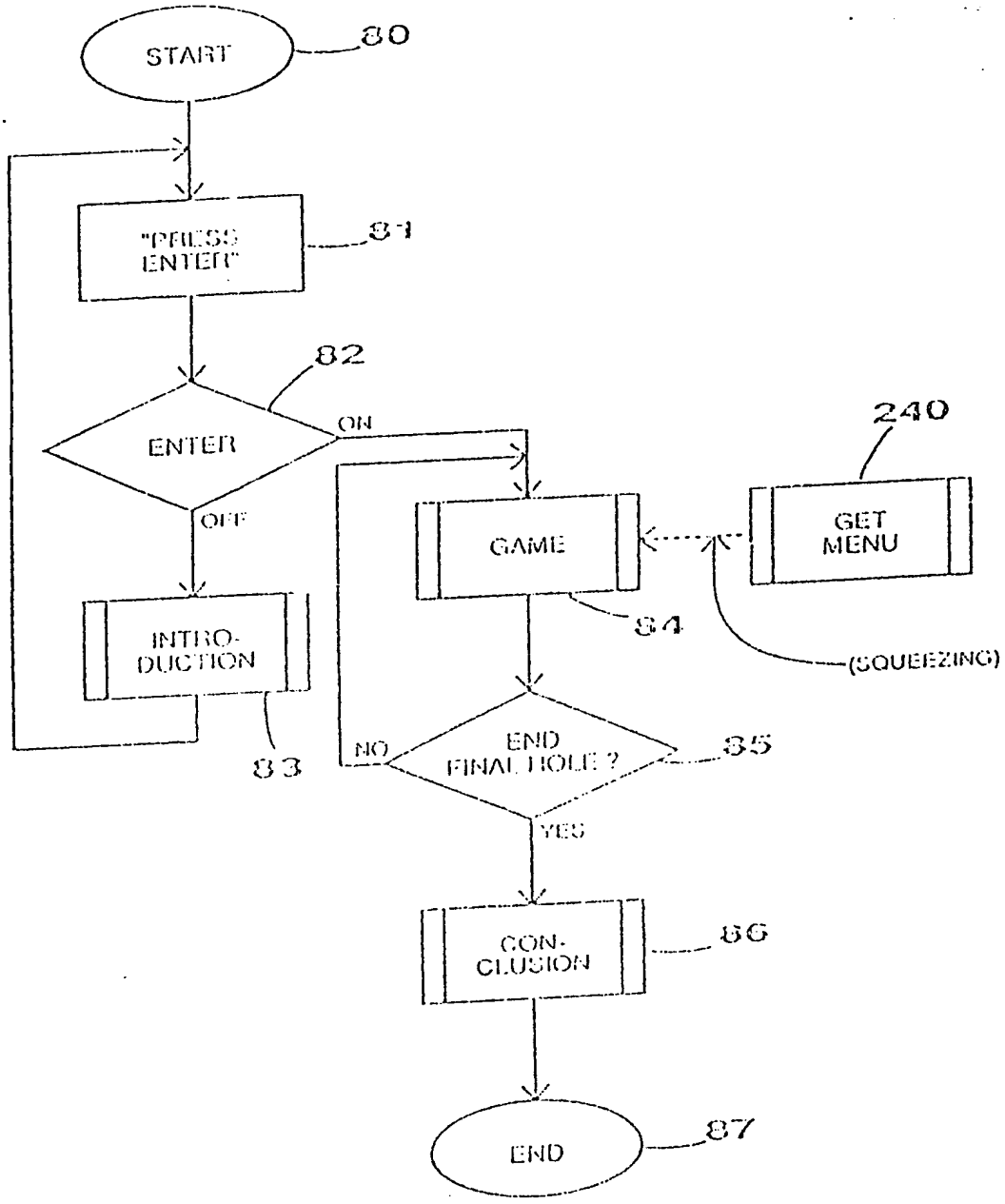


Fig. 6

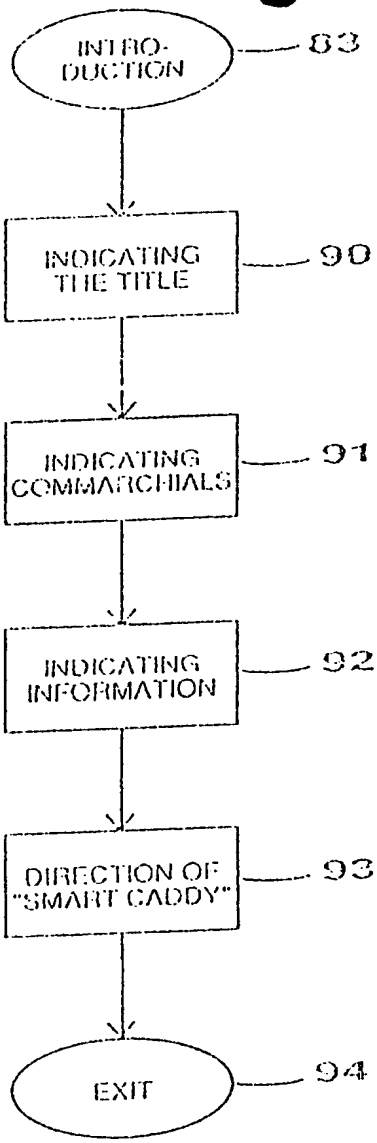

INTRO-
DUCTION
83
INDICATING
THE TITLE
90
INDICATING
COMMARCHIALS
91
INDICATING
INFORMATION
92
DIRECTION OF
"SMART CADDY"
93
EXIT
94

Fig. 7

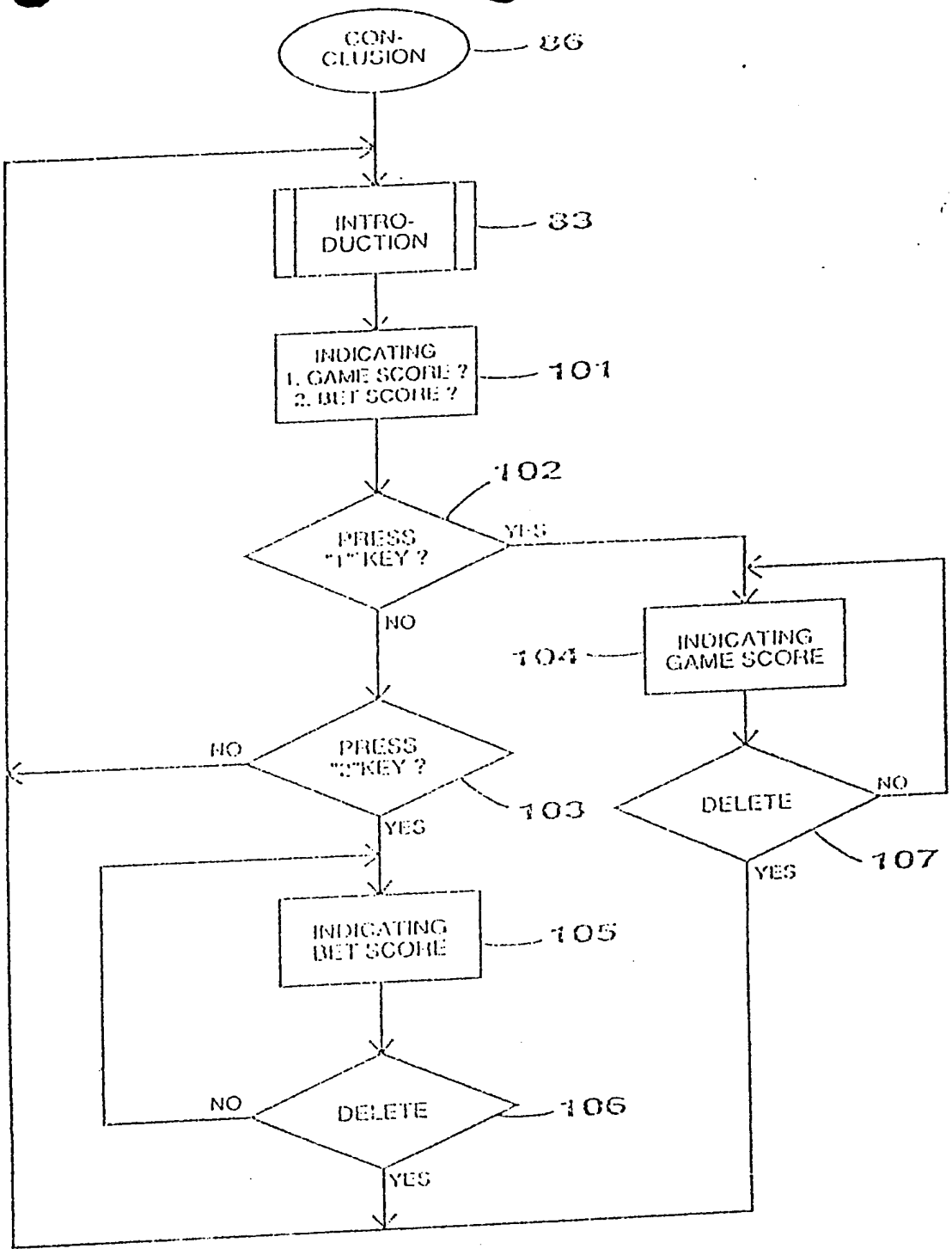

CON-
CLUSION
86
INTRO-
DUCTION
83
INDICATING
1. GAME SCORE ?
2. BET SCORE ?
101
102
PRESS
"1" KEY ?
YES
NO
INDICATING
GAME SCORE
104
NO
PRESS
"2" KEY ?
103
DELETE
NO
YES
107
YES
INDICATING
BET SCORE
105
NO
DELETE
106
YES

Fig. 8

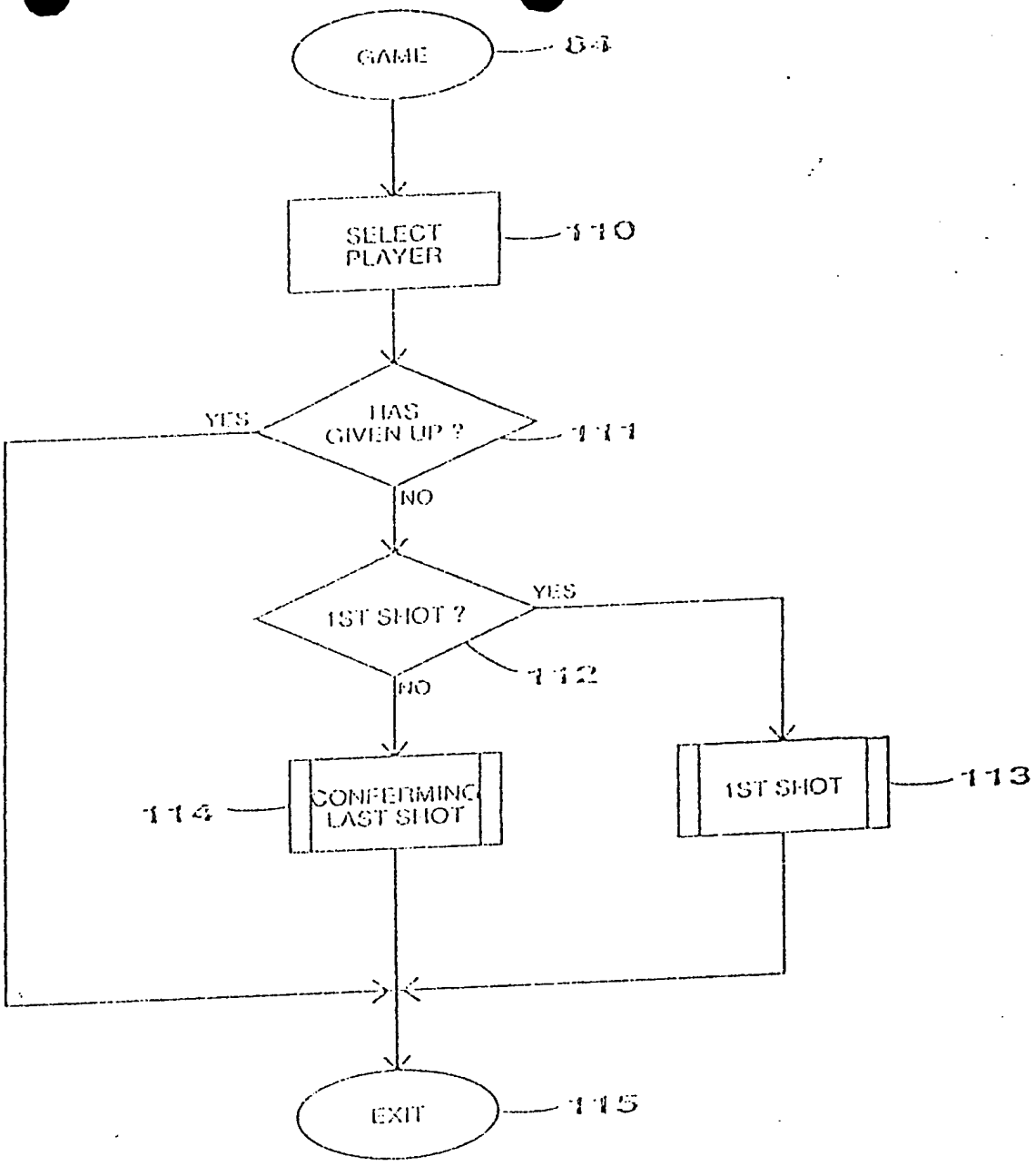

GAME
SELECT PLAYER
110
HAS GIVEN UP ?
YES
111
NO
1ST SHOT ?
YES
112
NO
CONFIRMING LAST SHOT
114
1ST SHOT
113
EXIT
115

Fig. 9

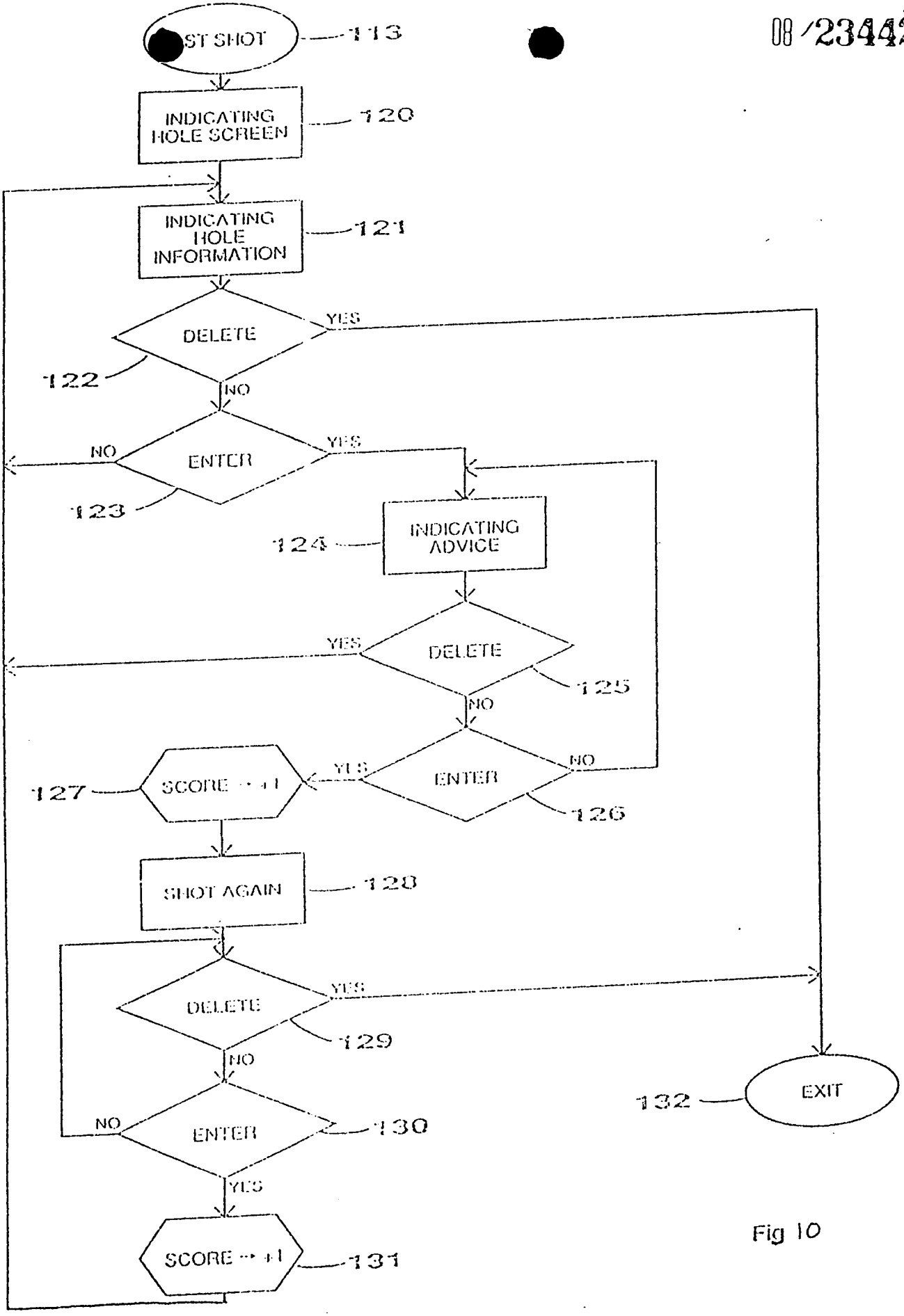

ST SHOT
113
INDICATING HOLE SCREEN
120
INDICATING HOLE INFORMATION
121
DELETE
YES
122
NO
ENTER
NO
YES
123
INDICATING ADVICE
124
DELETE
YES
125
NO
ENTER
NO
YES
SCORE + +1
127
126
SHOT AGAIN
128
DELETE
YES
129
NO
ENTER
NO
130
YES
SCORE + +1
131
EXIT
132

Fig 10

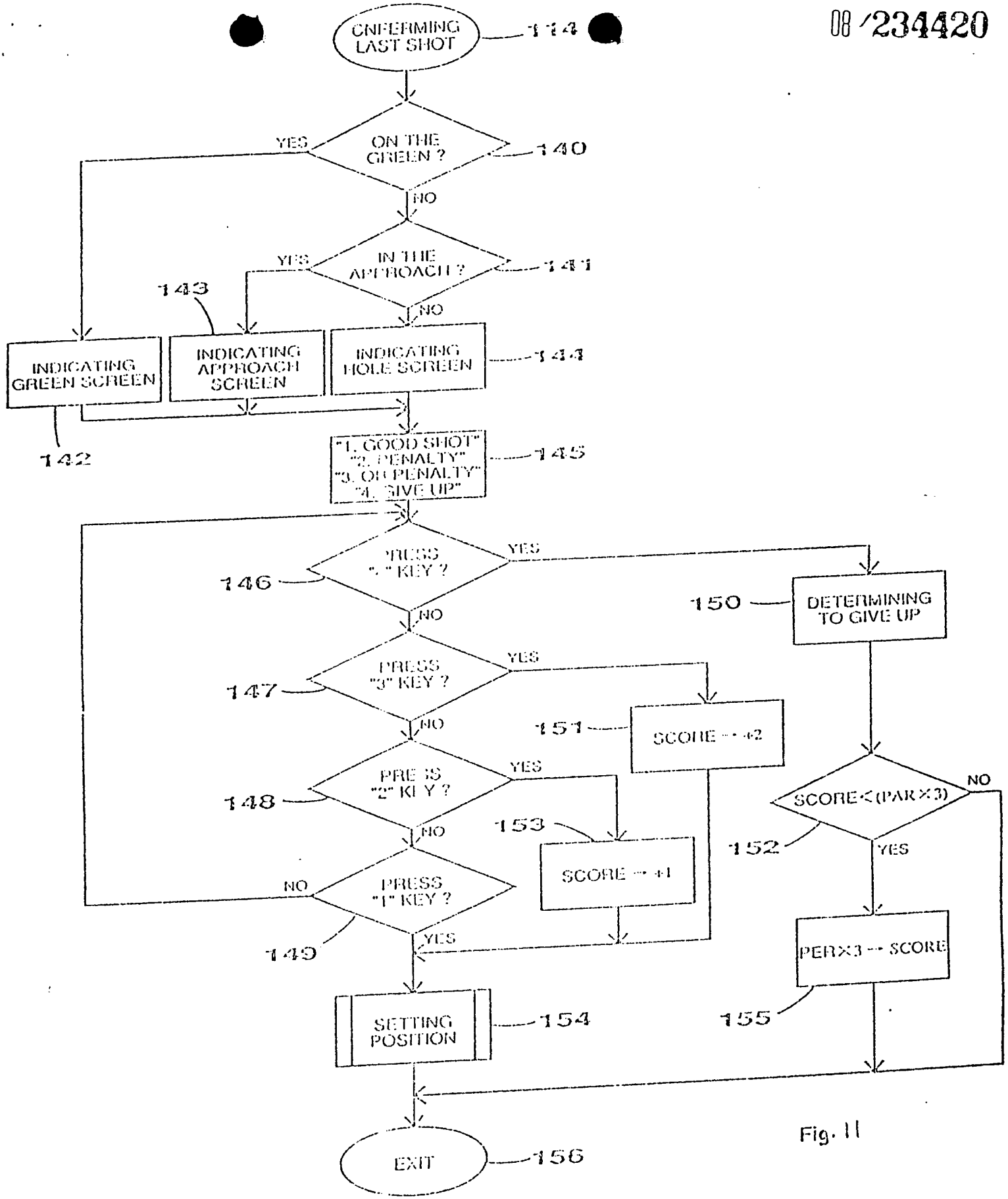

CONFERMING LAST SHOT
114
ON THE GREEN ?
140
YES
NO
IN THE APPROACH ?
141
YES
NO
143
INDICATING GREEN SCREEN
INDICATING APPROACH SCREEN
INDICATING HOLE SCREEN
144
142
"1. GOOD SHOT"
"2. PENALTY"
"3. OB PENALTY"
"4. GIVE UP"
145
PRESS "." KEY ?
146
YES
NO
PRESS "3" KEY ?
147
YES
NO
PRESS "2" KEY ?
148
YES
NO
PRESS "1" KEY ?
149
YES
NO
150
DETERMINING TO GIVE UP
151
SCORE + +2
153
SCORE + +1
SCORE<(PAR×3)
152
YES
NO
PER×3 → SCORE
155
SETTING POSITION
154
EXIT
156

Fig. 11

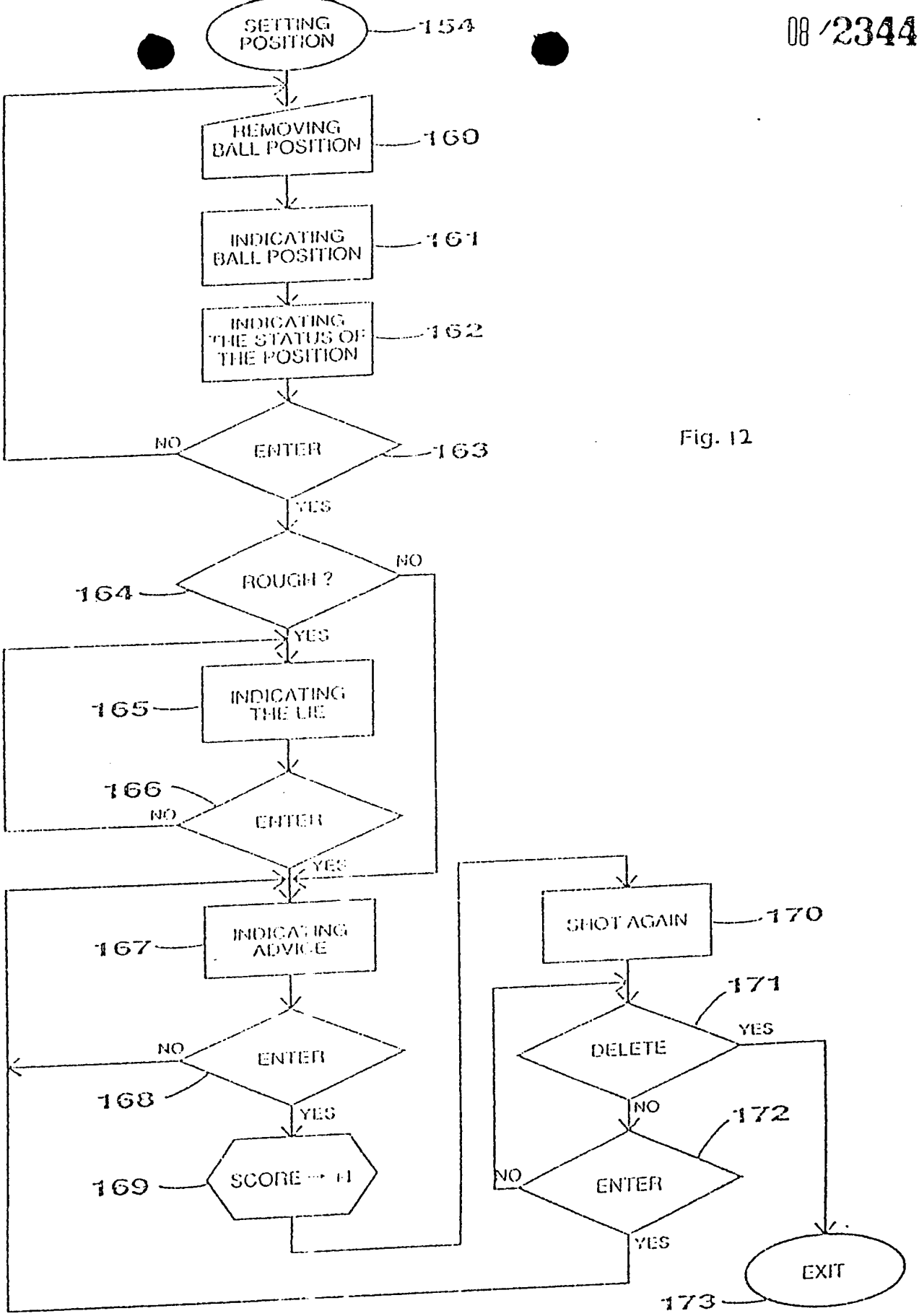

SETTING POSITION
154
REMOVING BALL POSITION
160
INDICATING BALL POSITION
161
INDICATING THE STATUS OF THE POSITION
162
ENTER
163
NO
YES
ROUGH ?
164
NO
YES
INDICATING THE LIE
165
166
ENTER
NO
YES
INDICATING ADVICE
167
ENTER
NO
168
YES
SCORE + 1
169
SHOT AGAIN
170
171
DELETE
YES
NO
172
ENTER
NO
YES
EXIT
173

Fig. 12

HOST COMPUTER PROGRAM
FLOW CHART

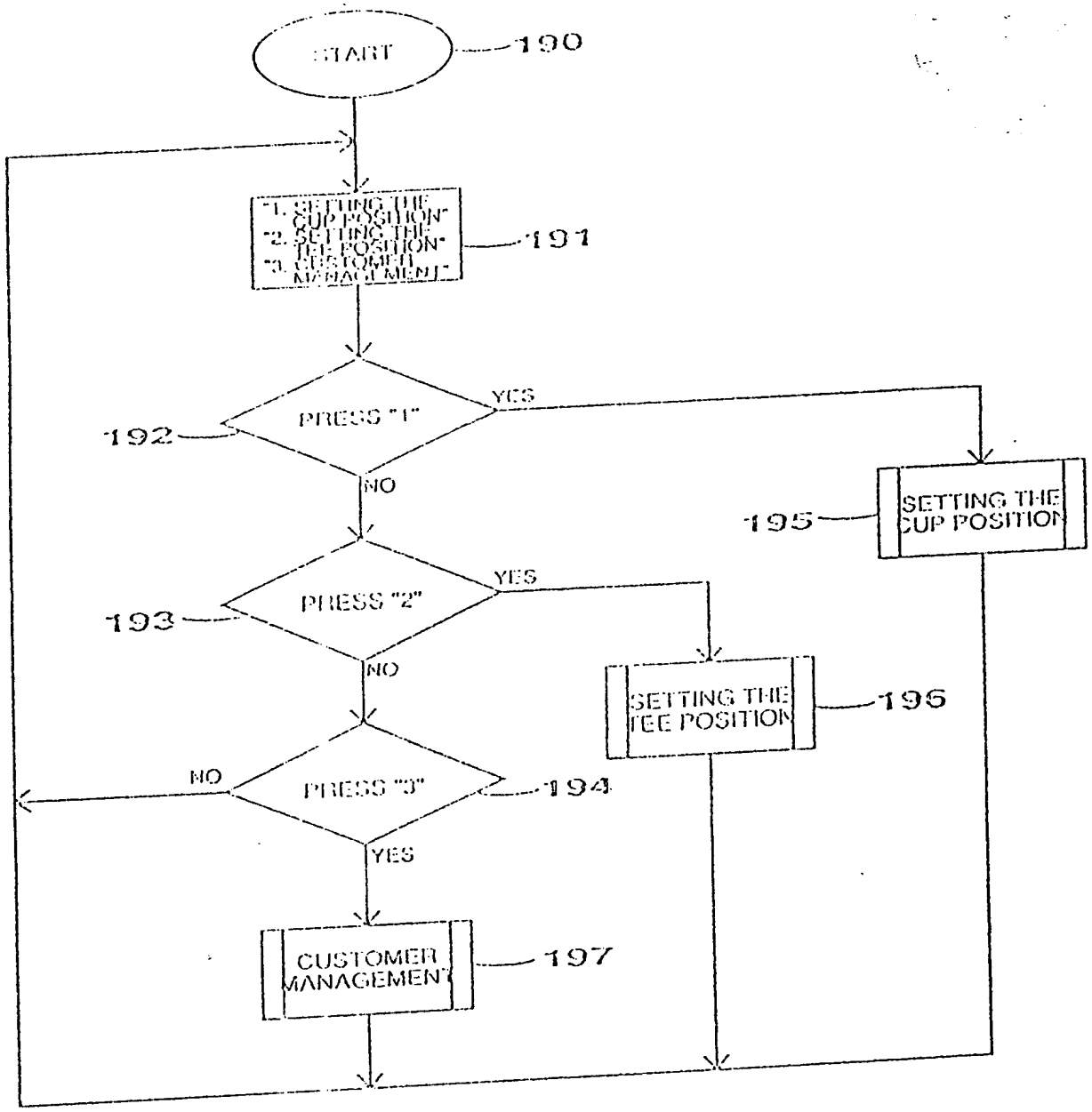


Fig. 13

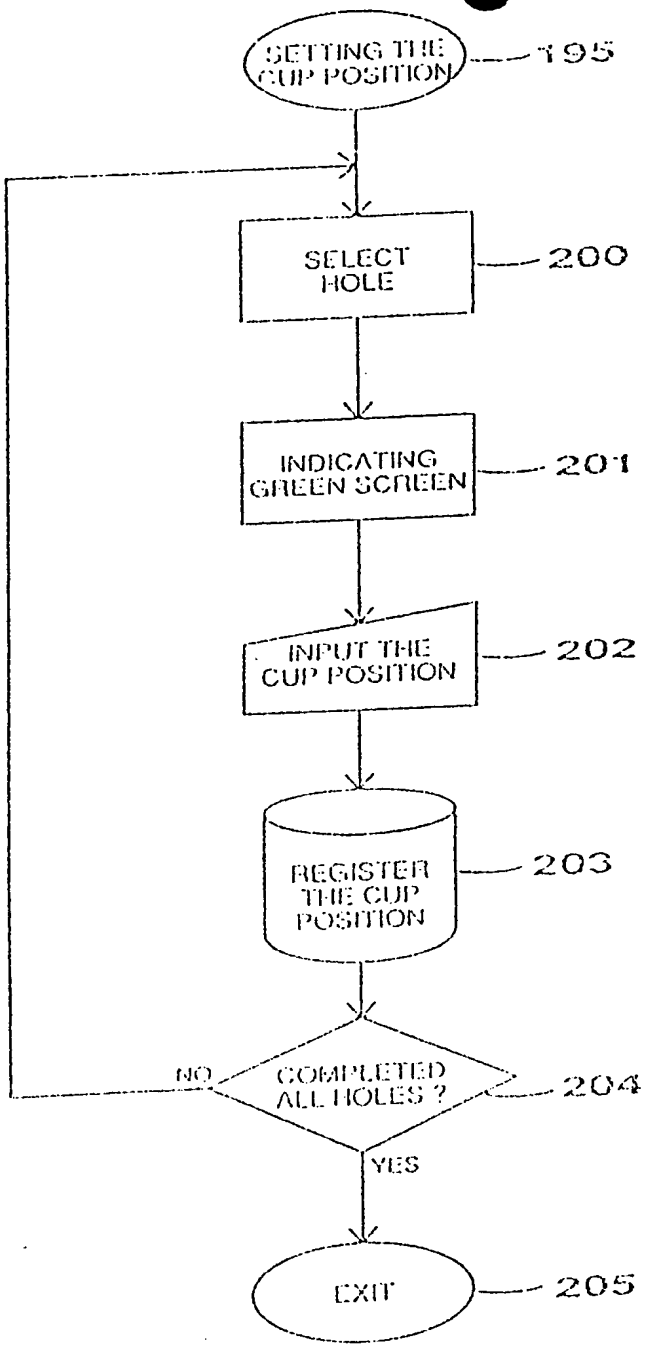

SETTING THE CUP POSITION
195
SELECT HOLE
200
INDICATING GREEN SCREEN
201
INPUT THE CUP POSITION
202
REGISTER THE CUP POSITION
203
NO
COMPLETED ALL HOLES ?
204
YES
EXIT
205

Fig. 14

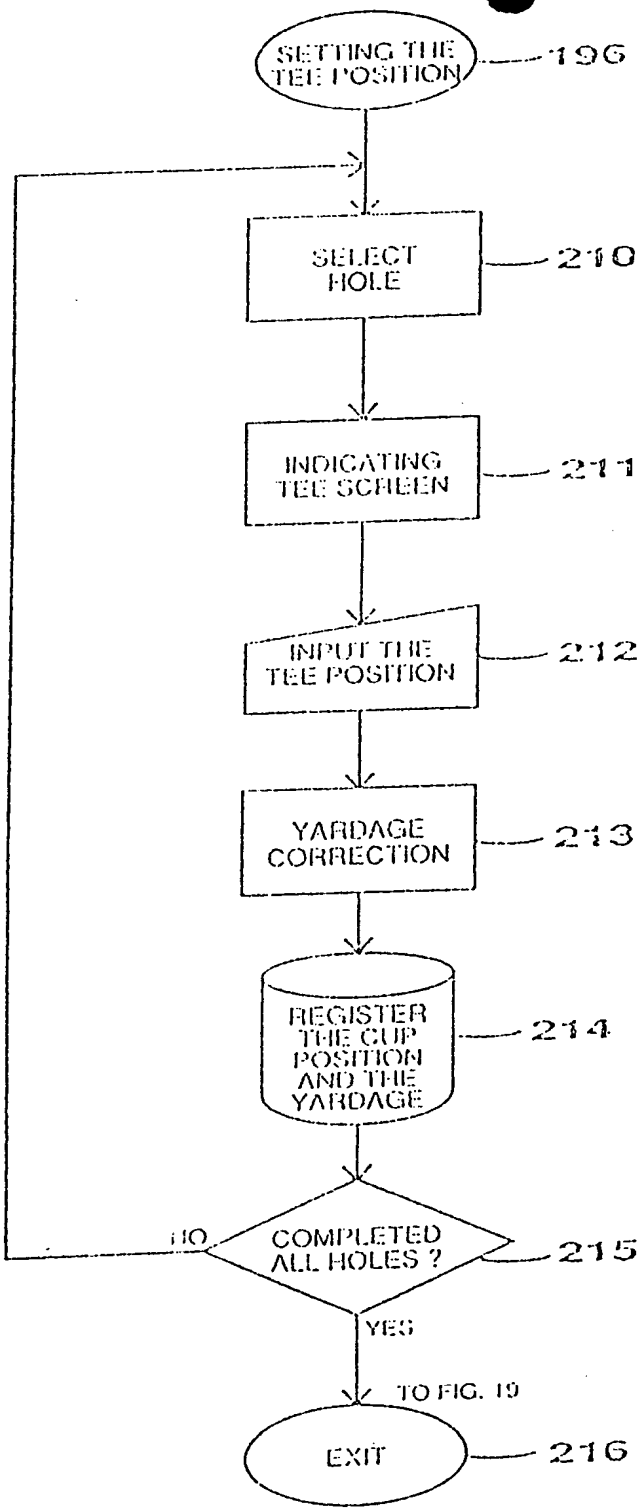

SETTING THE TEE POSITION
196
SELECT HOLE
210
INDICATING TEE SCREEN
211
INPUT THE TEE POSITION
212
YARDAGE CORRECTION
213
REGISTER THE CUP POSITION AND THE YARDAGE
214
NO
COMPLETED ALL HOLES ?
215
YES
TO FIG. 19
EXIT
216

Fig. 15

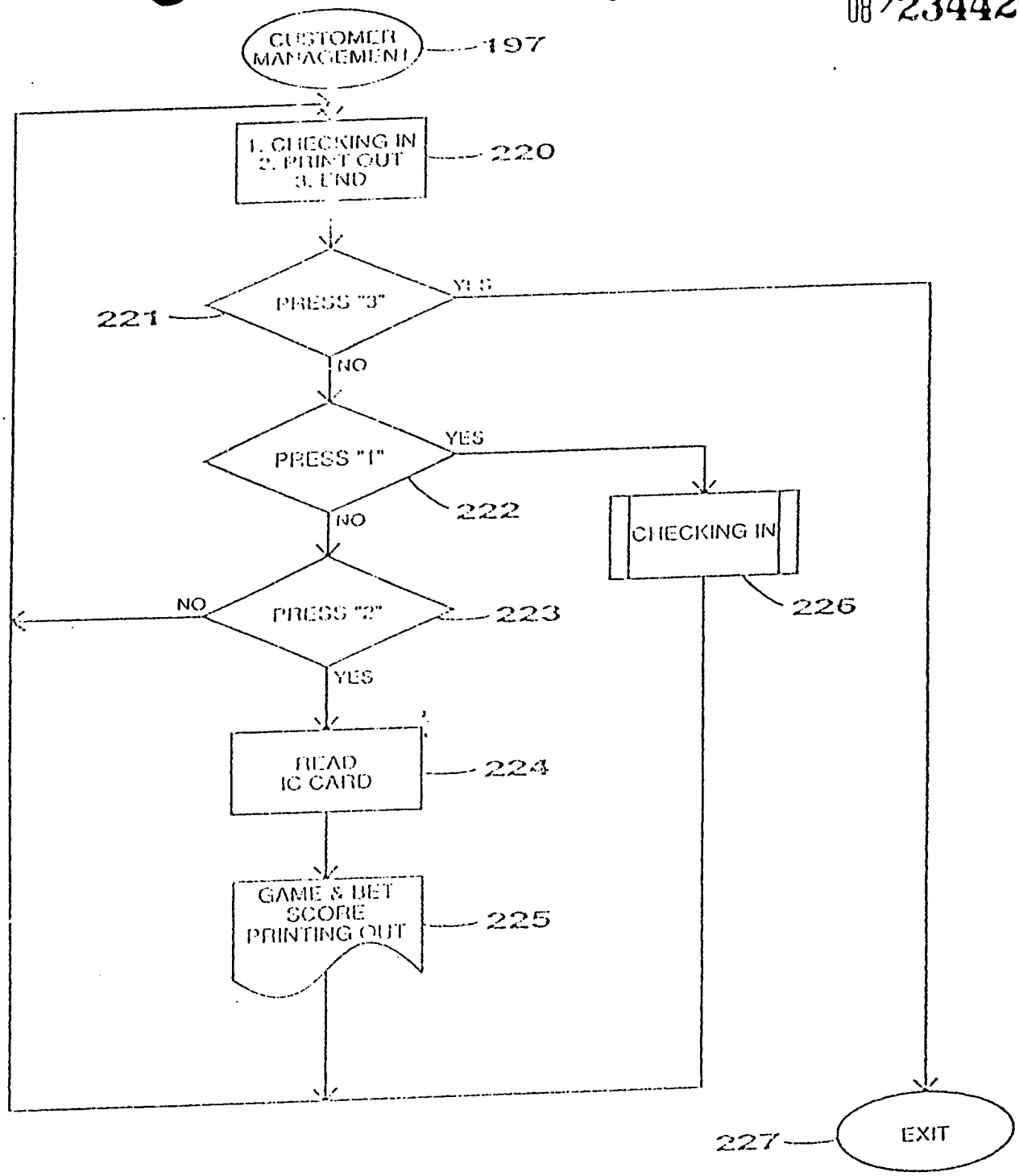

CUSTOMER MANAGEMENT
197
1. CHECKING IN
2. PRINT OUT
3. END
220
PRESS "3"
221
YES
NO
PRESS "1"
222
YES
NO
CHECKING IN
226
PRESS "2"
223
NO
YES
READ IC CARD
224
GAME & BET SCORE PRINTING OUT
225
EXIT
227

Fig. 16

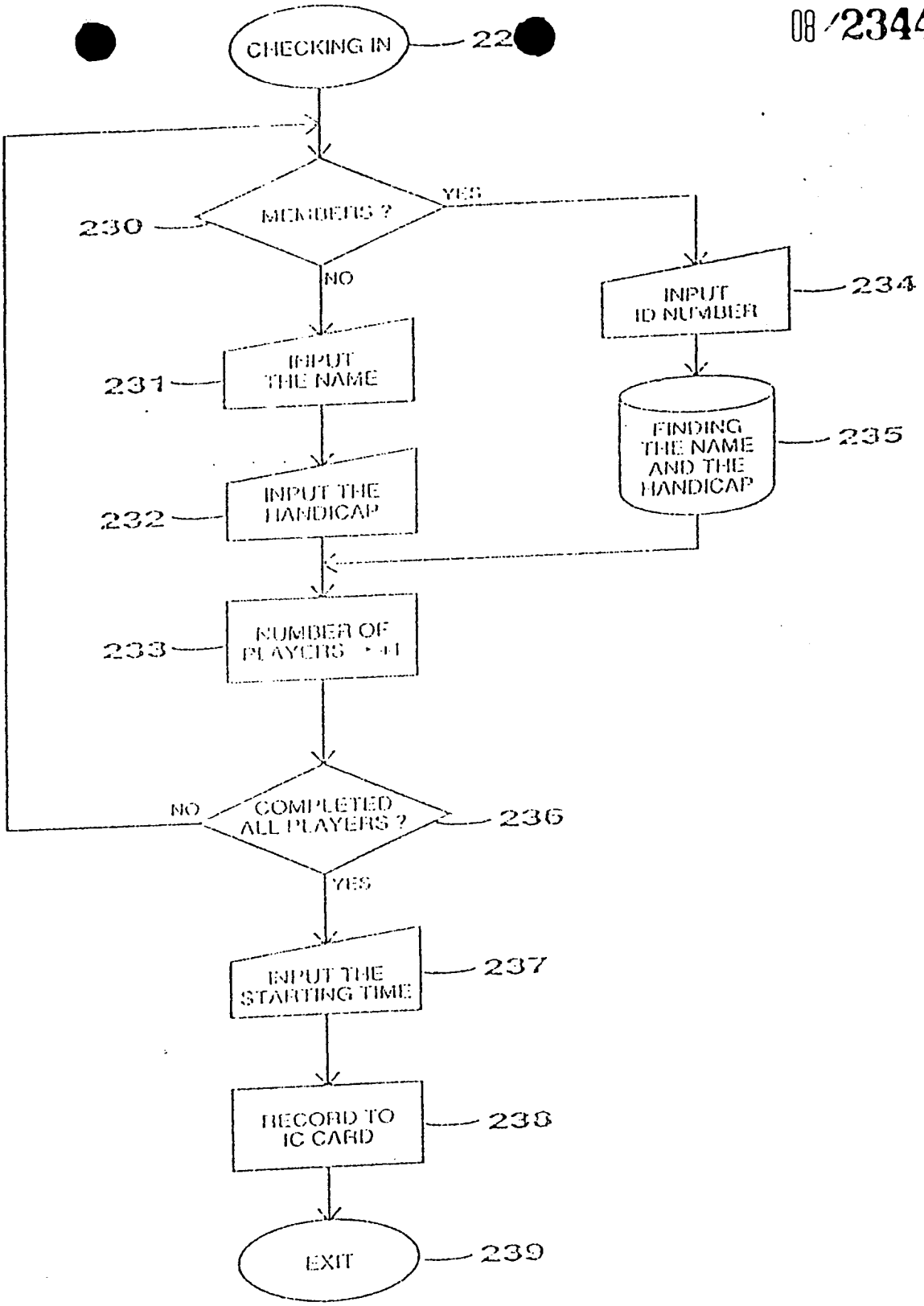

CHECKING IN
22
MEMBERS ?
230
YES
NO
INPUT THE NAME
231
INPUT THE HANDICAP
232
INPUT ID NUMBER
234
FINDING THE NAME AND THE HANDICAP
235
NUMBER OF PLAYERS + 1
233
COMPLETED ALL PLAYERS ?
236
NO
YES
INPUT THE STARTING TIME
237
RECORD TO IC CARD
238
EXIT
239

Fig. 17

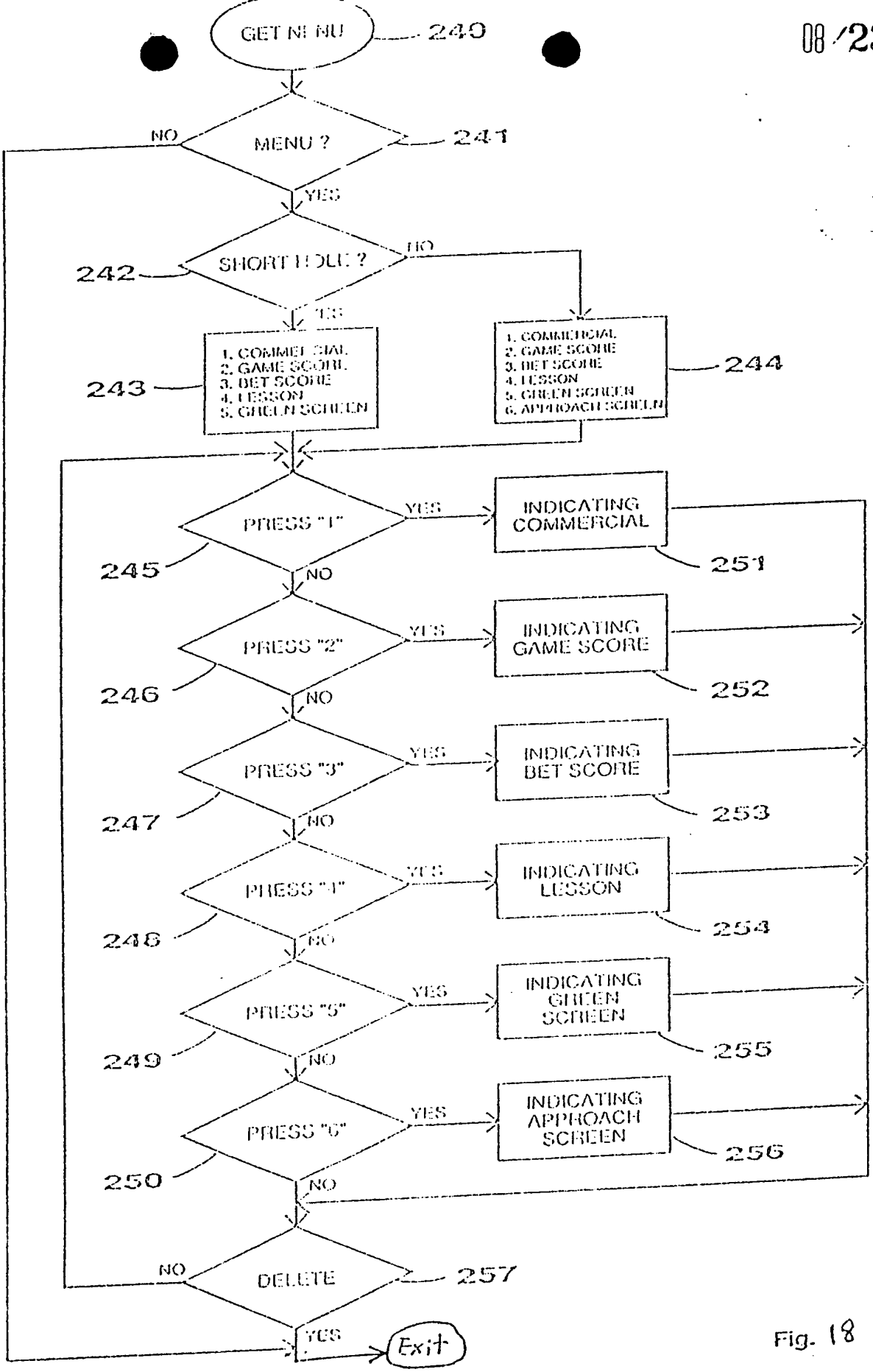

GET MENU
240
MENU ?
241
NO
YES
SHORT TITLE ?
242
NO
YES
1. COMMERCIAL
2. GAME SCORE
3. BET SCORE
4. LESSON
5. GREEN SCREEN
243
1. COMMERCIAL
2. GAME SCORE
3. BET SCORE
4. LESSON
5. GREEN SCREEN
6. APPROACH SCREEN
244
PRESS "1"
245
YES
INDICATING COMMERCIAL
251
NO
PRESS "2"
246
YES
INDICATING GAME SCORE
252
NO
PRESS "3"
247
YES
INDICATING BET SCORE
253
NO
PRESS "4"
248
YES
INDICATING LESSON
254
NO
PRESS "5"
249
YES
INDICATING GREEN SCREEN
255
NO
PRESS "6"
250
YES
INDICATING APPROACH SCREEN
256
NO
DELETE
257
NO
YES
Exit

Fig. 18

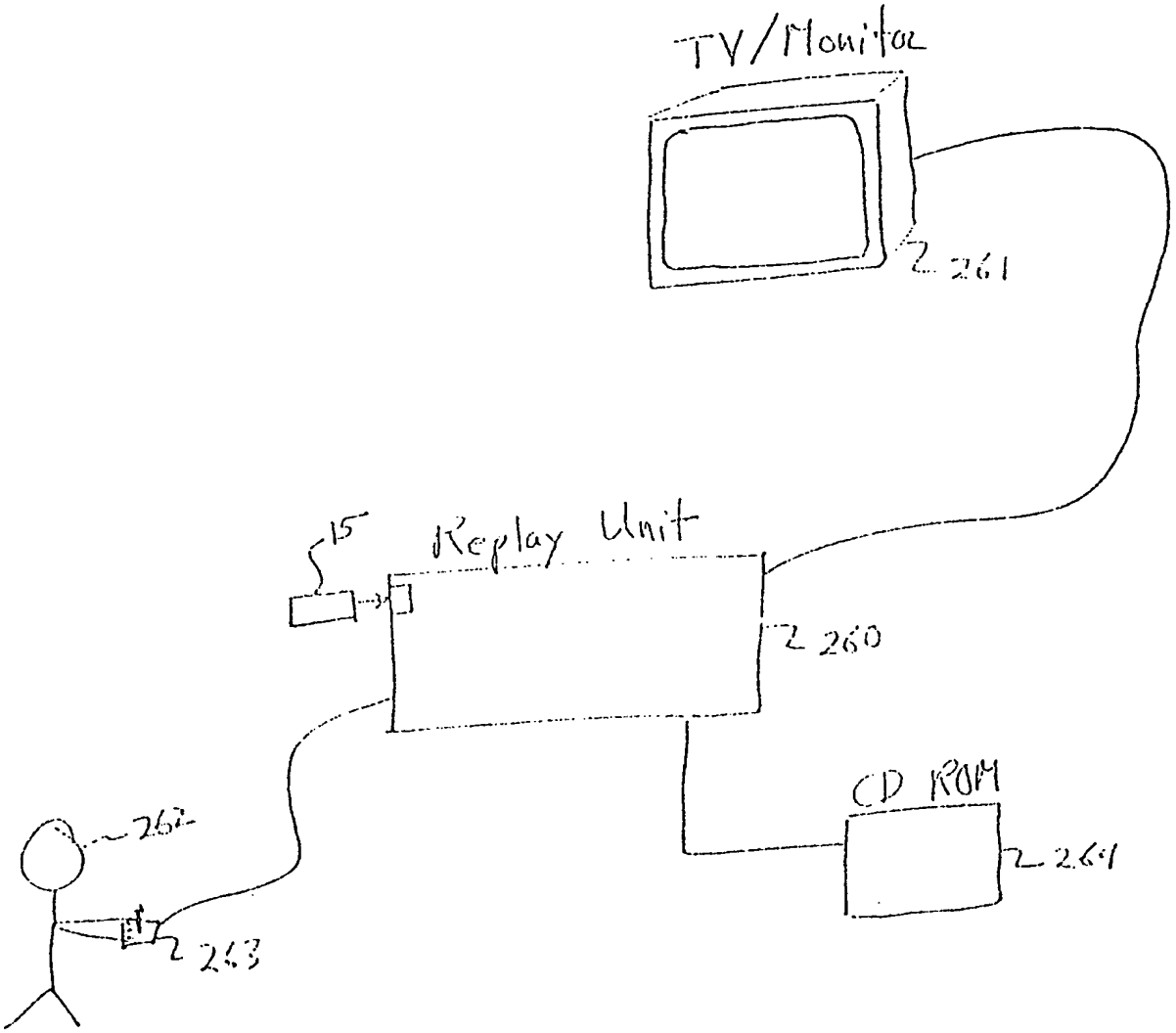
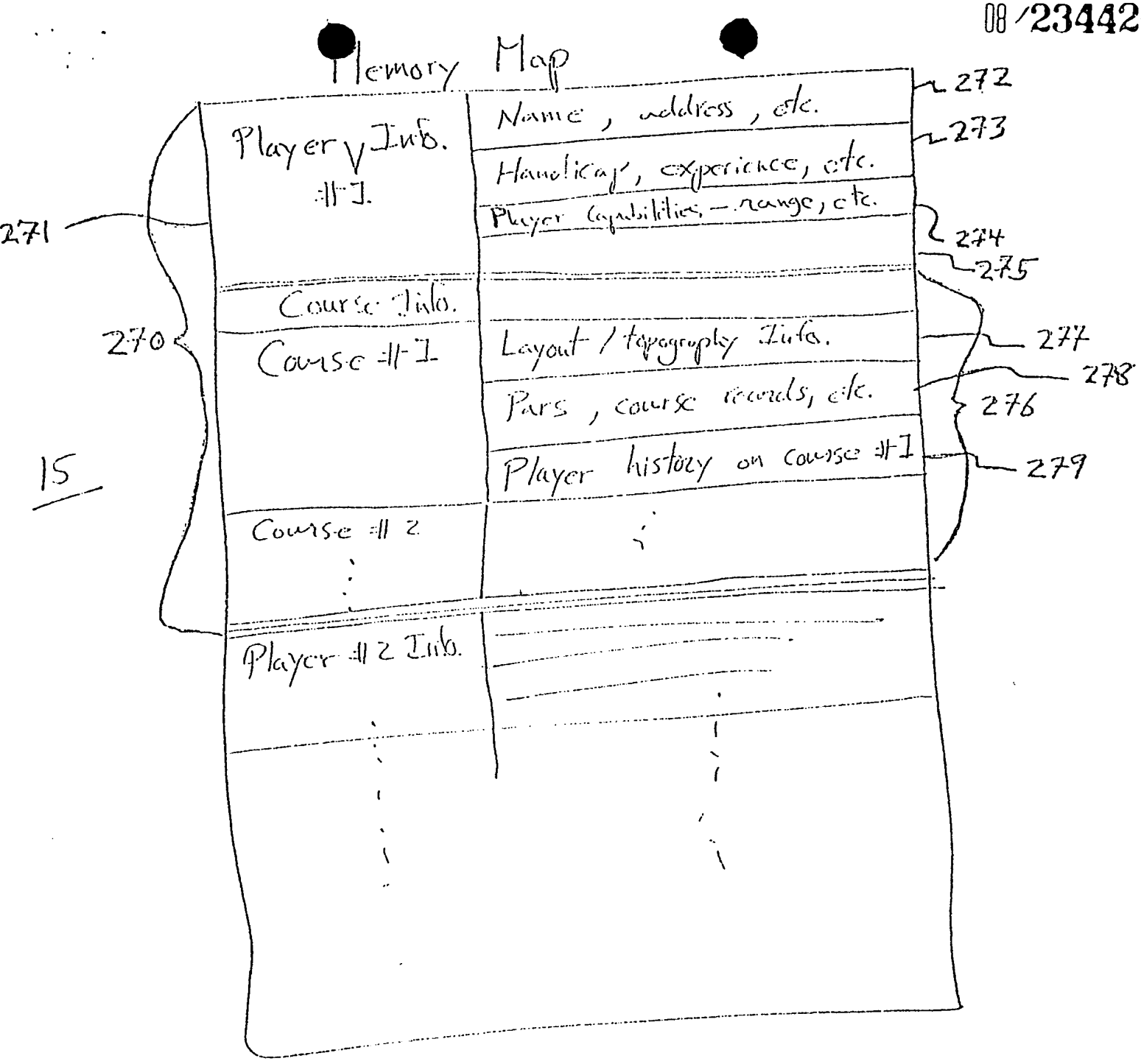


Fig. 19


Memory Map
Player Info. #1
Name, address, etc.
Handicap, experience, etc.
Player capabilities — range, etc.
Course Info.
Course #1
Layout / topography Info.
Pars, course records, etc.
Player history on course #1
Course #2
Player #2 Info.
271
270
272
273
274
275
276
277
278
279

15

Fig. 20

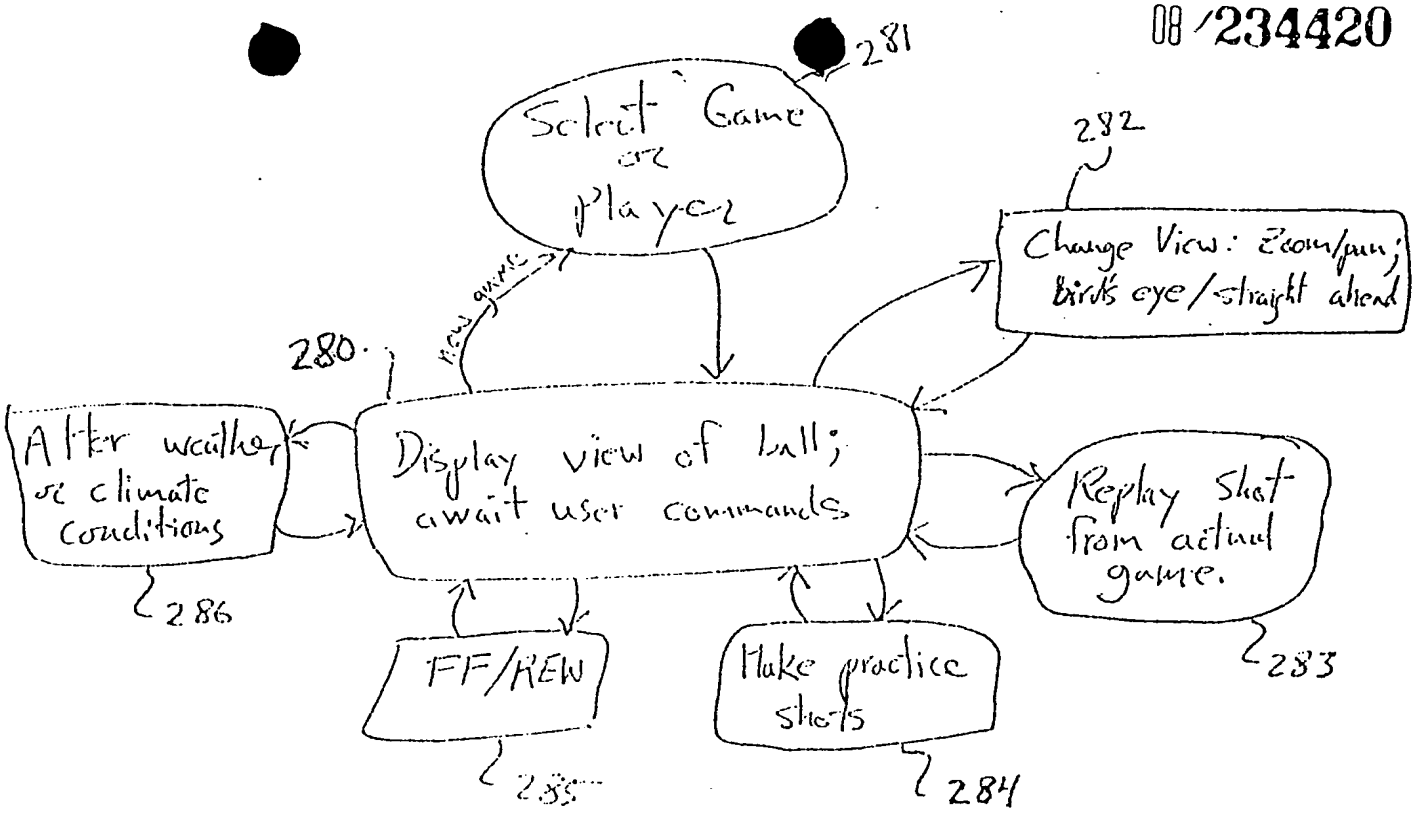

Select Game or Player
281
New game
280
Change View: Zoom/pan; bird's eye/straight ahead
282
Alter weather or climate conditions
286
Display view of ball; await user commands
Replay shot from actual game.
283
FF/REW
285
Make practice shots
284

Fig. 21

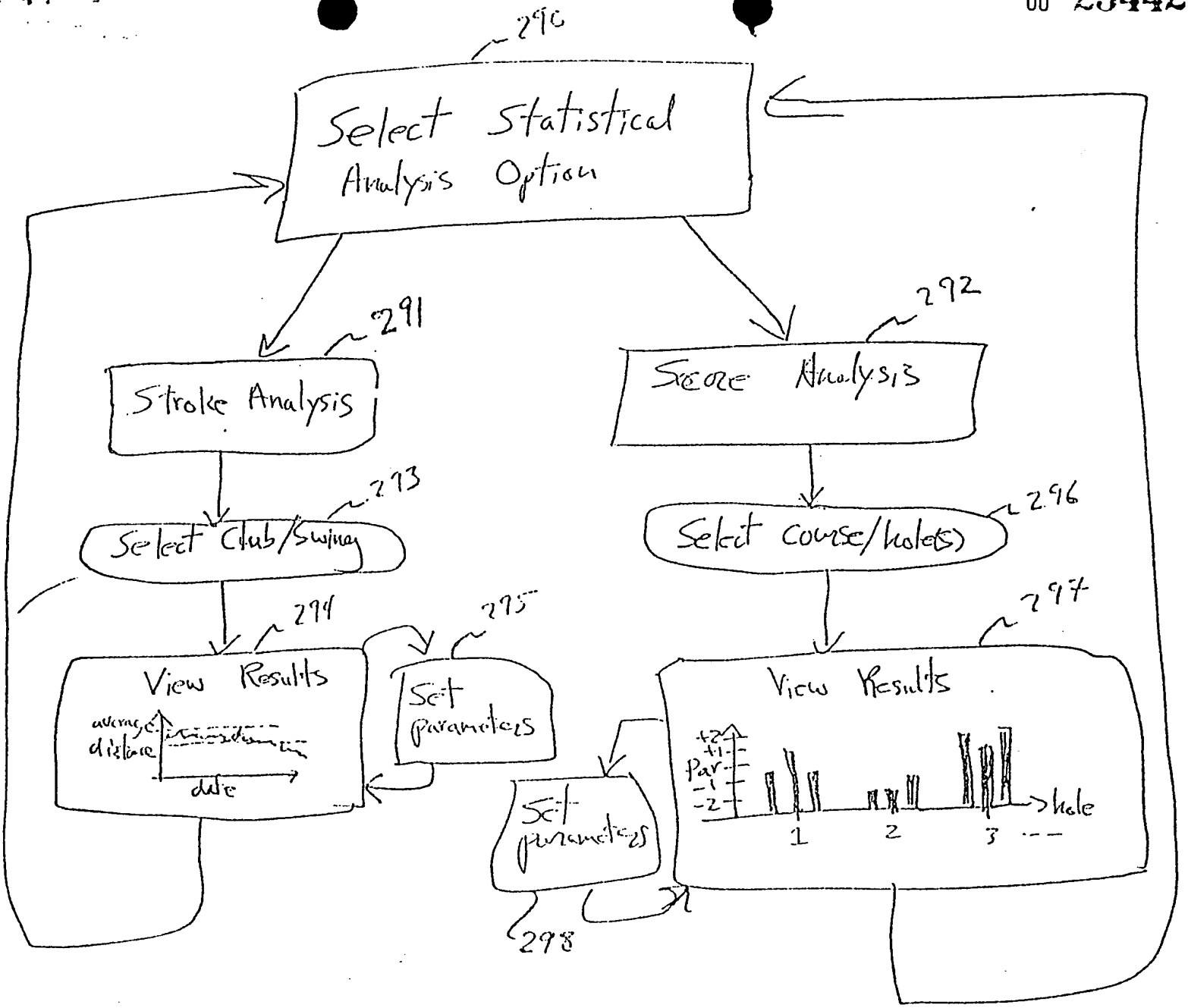

290
Select Statistical Analysis Option
291
Stroke Analysis
292
Score Analysis
293
Select Club/Swing
296
Select course/hole(s)
294
View Results
average distance
date
295
Set parameters
297
View Results
+2
+1
Par
-1
-2
hole
1
2
3
298
Set parameters

Fig. 22

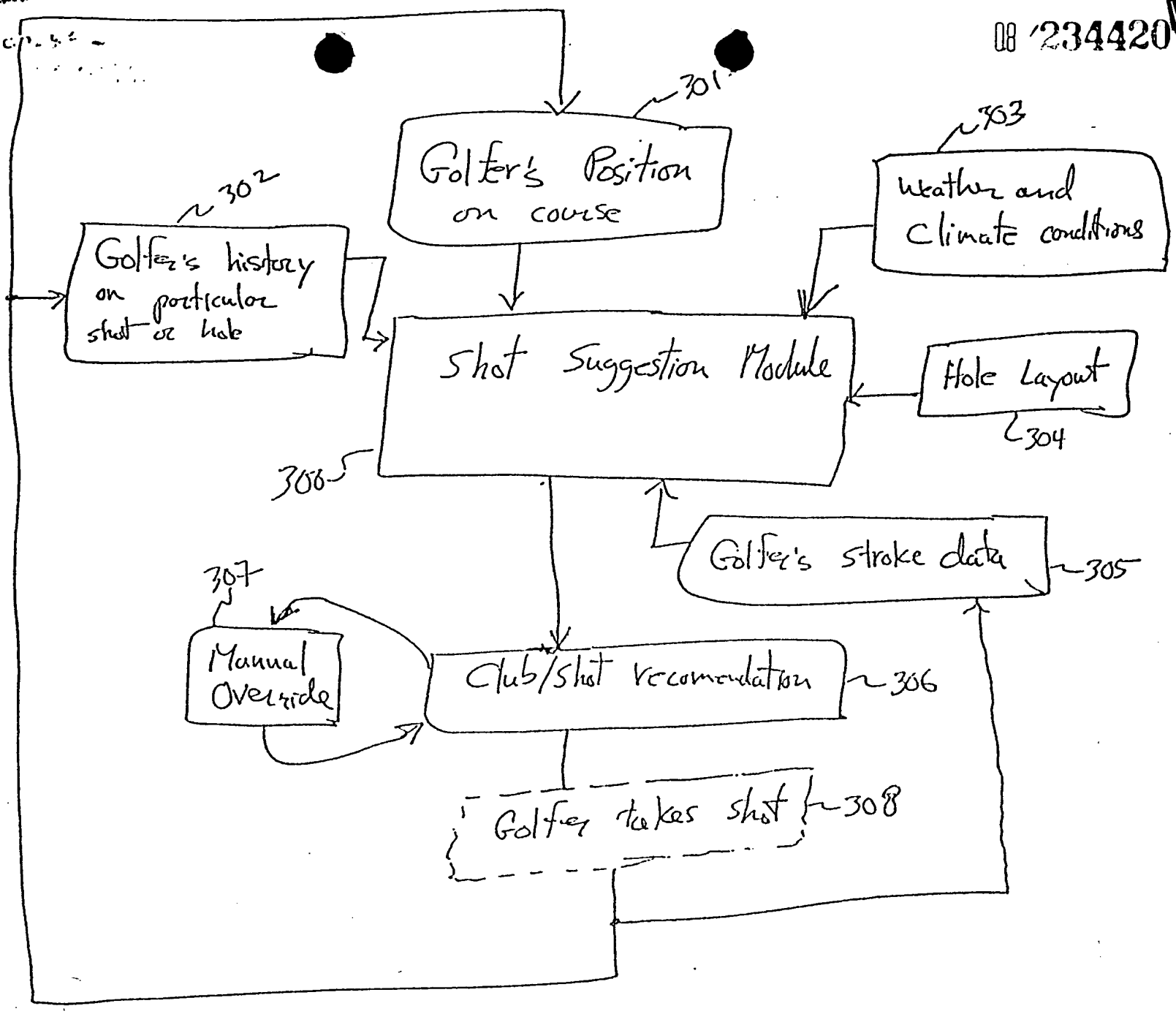

301
Golfer's Position on course
303
Weather and Climate conditions
302
Golfer's history on particular shot or hole
Shot Suggestion Module
Hole Layout
304
305
Golfer's stroke data
307
Manual Override
Club/Shot recomendation
306
Golfer takes shot
308

Fig. 23